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10/617,069	07/10/2003	Shinako Matsuyama	112857-411	3783
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BELL, BOYD & LLOYD, LLP			EXAMINER	
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CHICAGO, IL 60690				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/617,069

Applicant(s)

MATSUYAMA, SHINAKO

Examiner

Gerald Smarth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-11, & 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, & 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/10/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Remark date 9/10/07

2. Claims 1-16 are presented for examination. Claims 6 & 12 are currently being cancelled. Claims 14-16 are currently being added. Claims 1, 7 & 13 are independent claims. The remaining claims are dependent on claims 1, 7 and 13.

3. The Rejections are respectfully maintained and reproduced infra for application's convenience.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1-5,7-11, & 13-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Baize(6317838) as applied to claim above, and further in view of Aziz (5416842) .

Regarding Claim 1, Baize teaches a remote access system for accessing a predetermined resource from a remote place, comprising: an access target unit to be accessed (Fig. Wk1, Wkx, Wka); **(Baize discloses “The invention concerns a method to provide a secured remote access to private resources.” Column 1 line 7)**

An accessing unit (**fig 1-2**) for accessing the access target unit; and a connection unit(fig 1 SS) for standing proxy for the access target unit to the accessing unit; and a certificate authority for issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access system, wherein the accessing unit comprises: storage means(**fig 1 DBs**) for storing a certificate(fig 4a. 820) in which access privilege with regard to the resource is described; **(Baize discloses “Implementing in said digital data processing system security storing means for storing security data, said security data comprising at least data to authenticate said user, security profiles indicating which private resources each user may use and security data associated with said private resources. column 4 line 25)**

Presenting means for presenting the certificate stored in the storage means to the access target unit having the resource, the connection unit comprises: **(Baize discloses “at the user’s side, a first stage comprising the opening of a session, a second stage comprising the entering of security data, including at least user’s authentication data, and a third stage of requesting an access to a first private resource. Column 4 line 38)**

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Verification means for verifying the certificate received from the accessing unit; and transmission means for transmitting the certificate verified by the verification means to the access target unit specified by the accessing unit, ***(Baize discloses "A dialog is initiated between the security server Ss and this piece of security software 6, via a bus 60. The data transmissions are enciphered. The server Ss looks at the data base DBs and compares the received data(identity of user U1, password, etc.) with the content of said data base Dbs. It authenticates the requester, i.e. user U1, and send back a message to workstation WK1 and more precisely to it's security interface." Column 5 line 41)***

The access target unit comprises determination means for determining according to the certificate transmitted by the connection unit whether to permit the accessing unit to access the resource. ***(Baize discloses "When a user or a client device attempts to access to a particular protected resource located in a data processing system, generally it is necessary to check whether it may or not access to said resource. For example if the user sends a request so as to read some protected data, its request must be filtered, before granting such an access. On the second hand, after this authentication stage is performed, the request is allowed or discarded according to his rights or privileges." Column 1 line 23)***

Baize doesn't specifically teach a certificate authority for issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access system.

Aziz teaches a certificate authority for issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access system. ***(Aziz discloses another common network security requirement is to allow remote users to access the protected network from across the Internet in a secure fashion. As will be described, the present invention accommodates this requirement on top of packet layer encryption, without requiring changes to the various client applications used for remote access across the Internet; column 1 line 53-59. Aziz further discloses since the firewalls only have DH public keys, which have no signature capability, the firewalls themselves are unable to issue DH certificates. The firewall certificates are issued by organizational CAs which have jurisdiction over the range of IP addresses that are being certified; Column 6 line 16-23)***

Baize and Aziz are analogous art because they are from the same field of endeavor remote access.

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the remote access system of Baize to include a certificate authority for issuing a public-key. One of ordinary skill in the art would have been motivated to make this modification in order to have remote accessing system to have a security system which includes certificate authority for issuing a public key this is going to allow for remote devices to have a more robust and efficient network security. Further it will allow for remote users to access the protected network from across the internet in a secure fashion.

Therefore, it would be obvious to combine Baize and Aziz to have a remote accessing system which includes a security system with a certificate authority for issuing public-keys.

Claim 2, Baize in view of Aziz taught a remote access system according to claim 1, as described above. Baize further teaches where in the connection unit connects a network which includes the access target unit and another network to each other.

***(Baize discloses "The first solution is know as a "VPN"(Virtual Private Network"). It consists in providing secured " data pipes" constituting so-called "Extranets" which are extensions of Intranets or LANs. "VPNs can connect from one network to another. "Column 3 line 3)***

Claim 3, Baize in view of Aziz taught a remote access system according to claim 1, as described above. Baize further teaches wherein the certificate includes proxy information which indicates that the connection unit stands proxy for the access target unit. ***(Baize discloses" A typical proxy accepts a connection, makes a decision on whether or not the user or the client IP address is permitted to use the proxy(according to the requested server or resource, time period , etc.), possibly does additional authentication , and completes a connection on behalf of the user to the remote server or resource, through bus Bo(output bus)"column 6 line 36).***

Regarding claim 4, Baize in view of Aziz taught a remote access system according to claim 1, as described above. Baize further teaches comprising an authority for issuing an issue permission certificate serving as a certificate for giving

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permission to issue to the accessing unit, the certificate in which access privilege with regard to the resource is described, wherein the connection unit issues the issue permission certificate issued by the authority, to the accessing unit. ***(Baize discloses "A security server Ss is also provided. It communicates with a security data base DBs which contains security and authorization profiles of both secured or private resources, ie S1 to Sm, and local users, for example U1. The security server Ss is supposed to be under control of a security officer" Column 5 line 27)***

Regarding claim 5, Baize in view of Aziz taught a remote access system according to claim 4, as described. Baize teaches wherein the certificate in which access privilege with regard to the resource is described includes information indicating that permission to issue to the accessing unit the certificate in which access privilege with regard to the resource is described is given, as role information indicating a role assigned to the connection unit. ***(Baize discloses a method and architecture allowing a remote user, especially an Internet remote user, to securely access private resources protected by a firewall. The architecture comprises a computer facility and many remote user terminals connected via the Internet; Abstract line 1-5 )***

Claim 6 (cancelled)

Regarding claim 7, Baize teaches a remote access method for accessing a predetermined resource from a remote place, comprising: issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access method.



A storage step of storing a certificate in which access privilege with regard to the resource is described; a presenting step of presenting the certificate stored in the storage step to an access target unit having the resource; ***(Baize discloses "Implementing in said digital data processing system security storing means for storing security data, said security data comprising at least data to authenticate said user, security profiles indicating which private resources each user may use and security data associated with said private resource" Column 4 line 26)***

A verification step of verifying the certificate received from an accessing unit for accessing the access target unit; a transmission step of transmitting the certificate verified in the verification step to the access target unit specified by the accessing unit; and a determination step of determining whether to permit the accessing unit to access the resource, according to the certificate transmitted by a connection unit for standing proxy for the access target unit to the accessing unit. ***.(Baize discloses "A dialog is initiated between the security server Ss and this piece of security software 6, via a bus 60. The data transmissions are enciphered. The server Ss looks at the data base DBs and compares the received data(identity of user U1, password, etc.) with the content of said data base Dbs. It authenticates the requester, i.e. user U1, and send back a message to workstation WK1 and more precisely to it's security interface." column 5 line 41)***

Baize doesn't specifically teach issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access method.

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Aziz issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access method. ***(Aziz discloses another common network security requirement is to allow remote users to access the protected network from across the Internet in a secure fashion. As will be described, the present invention accommodates this requirement on top of packet layer encryption, without requiring changes to the various client applications used for remote access across the Internet; column 1 line 53-59. Aziz further discloses since the firewalls only have DH public keys, which have no signature capability, the firewalls themselves are unable to issue DH certificates. The firewall certificates are issued by organizational CAs which have jurisdiction over the range of IP addresses that are being certified; Column 6 line 16-23)***

Baize and Aziz are analogous art because they are from the same field of endeavor remote access.

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the remote access system of Baize to include a certificate authority for issuing a public-key. One of ordinary skill in the art would have been motivated to make this modification in order to have remote accessing system to have a security system which includes certificate authority for issuing a public key this is going to allow for remote devices to have a more robust and efficient network security. Further it will allow for remote users to access the protected network from across the internet in a secure fashion.

Therefore, it would be obvious to combine Baize and Aziz to have a remote accessing system which includes a security system with a certificate authority for issuing a public-keys.

Regarding Claim 8, Baize in view of Aziz taught a remote access method according to claim 7, as described above. Baize further teaches wherein a network which includes the access target unit and another network are connected to each other. ***(Baize discloses "The first solution is known as a "VPN"(Virtual Private Network"). It consists in providing secured " data pipes" constituting so-called "Extranets" which are extensions of Intranets or LANs. "VPNs can connect from one network to another. Column 3 page 3)***

Claim 9, Baize in view of Aziz taught a remote access method according to claim 7, as described above. Baize further teaches wherein the certificate includes proxy information which indicates that the connection unit stands proxy for the access target unit. ***(Baize discloses" A typical proxy accepts a connection, makes a decision on whether or not the user or the client IP address is permitted to use the proxy(according to the requested server or resource, time period , etc.), possibly does additional authentication , and completes a connection on behalf of the user to the remote server or resource, through bus Bo(output bus)column 6 line 36).***

Claim 10, Baize in view of Aziz taught a remote access method according to claim 7. Baize also teaches further comprising a step of issuing an issue permission certificate serving as a certificate for giving permission to issue to the accessing unit, the certificate in which access privilege with regard to the resource is described,

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wherein the issue permission certificate issued by the authority is issued to the accessing unit. ***(Baize discloses “ A security server Ss is also provided. It communicates with a security data base DBs which contains security and authorization profiles of both secured or private resources, ie S1 to Sm, and local users, for example U1. The security server Ss is supposed to be under control of a security officer” column 5 line 27)***

Claim 11, Baize in view of Aziz taught a remote access method according to Claim 10. Baize further teaches wherein the certificate in which access privilege with regard to the resource is described includes information indicating that permission to issue to the accessing unit the certificate in which access privilege with regard to the resource is described is given, as role information indicating a role assigned to the connection unit. ***(Baize discloses a method and architecture allowing a remote user, especially an Internet remote user, to securely access private resources protected by a firewall. The architecture comprises a computer facility and many remote user terminals connected via the Internet; Abstract line 1-5 )***

Claim 12 (cancelled)

Claim 13 States a remote access program executable by a computer, for accessing a predetermined resource from a remote place, the program comprising: issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access program;

A storage step of storing a certificate in which access privilege with regard to the resource is described; a presenting step of presenting the certificate stored in the

storage step to an access target unit having the resource; ***(Baize discloses “Implementing in said digital data processing system security storing means for storing security data, said security data comprising at least data to authenticate said user, security profiles indicating which private resources each user may use and security data associated with said private resource” Column 4 line 26)***

A verification step of verifying the certificate received from an accessing unit for accessing the access target unit; a transmission step of transmitting the certificate verified in the verification step to the access target unit specified by the accessing unit; and a determination step of determining whether to permit the accessing unit to access the resource, according to the certificate transmitted by a connection unit for standing proxy for the access target unit to the accessing unit. ***(Baize states “A dialog is initiated between the security server Ss and this piece of security software 6, via a bus 60. The data transmissions are enciphered. The server Ss looks at the data base DBs and compares the received data(identity of user U1, password, etc.) with the content of said data base Dbs. It authenticates the requester, i.e. user U1, and send back a message to workstation WK1 and more precisely to it’s security interface.” column 5 line 41).***

Baize doesn’t specifically teach issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access program.

Aziz issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access program. ***(Aziz discloses another common network security requirement is to allow remote users to access the protected***

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***network from across the Internet in a secure fashion. As will be described, the present invention accommodates this requirement on top of packet layer encryption, without requiring changes to the various client applications used for remote access across the Internet; column 1 line 53-59. Aziz further discloses since the firewalls only have DH public keys, which have no signature capability, the firewalls themselves are unable to issue DH certificates. The firewall certificates are issued by organizational CAs which have jurisdiction over the range of IP addresses that are being certified; Column 6 line 16-23)***

Baize and Aziz are analogous art because they are from the same field of endeavor remote access.

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the remote access system of Baize to include a certificate authority for issuing a public-key. One of ordinary skill in the art would have been motivated to make this modification in order to have remote accessing system to have a security system which includes certificate authority for issuing a public key this is going to allow for remote devices to have a more robust and efficient network security. Further it will allow for remote users to access the protected network from across the internet in a secure fashion.

Therefore, it would be obvious to combine Baize and Aziz to have a remote accessing system which includes a security system with a certificate authority for issuing a public-keys.

Regarding claim 14, Baize in view of Aziz taught a remote access system according to claim 1, as described above. Aziz further teaches wherein public-key certificates are issued to each entry so that each entity can perform mutual authentication.

***(Aziz discloses since the firewalls only have DH public keys, which have no signature capability, the firewalls themselves are unable to issue DH certificates. The firewall certificates are issued by organizational CAs which have jurisdiction over the range of IP addresses that are being certified; Column 6 line 16-23 )***

Regarding claim 15, Baize in view of Aziz taught a remote access method according to claim 7, as described above. Aziz further teaches wherein public-key certificates are issued to each entity so that each entity can perform mutual authentication

***(Aziz discloses since the firewalls only have DH public keys, which have no signature capability, the firewalls themselves are unable to issue DH certificates. The firewall certificates are issued by organizational CAs which have jurisdiction over the range of IP addresses that are being certified; Column 6 line 16-23 )***

Regarding claim 16, Baize in view of Aziz taught a remote access program according to claim 13, as described above. Aziz further teaches wherein public-key certificates are issued to each entity so that each entity can perform mutual authentication.

***(Aziz discloses since the firewalls only have DH public keys, which have no signature capability, the firewalls themselves are unable to issue DH certificates. The firewall certificates are issued by organizational CAs which have jurisdiction over the range of IP addresses that are being certified; Column 6 line 16-23)***

**Response to Arguments**

6. Applicant's arguments with respect to claim 1, 7,13,14, 15,16 have been considered but are moot in view of the new ground(s) of rejection. Claims 2-5, & 8-11 are still being maintained under current rejection. Claim 1, a certificate authority for issuing a public-key certificate based on a public key cryptosystem to each entity constituting the remote access system is being rejected by Aziz teaching a certificate authority for issuing a public-key. Claims 7, 13, with current amendments have been rejected by Aziz for teaching issuing a public-key certificate based on a public-key cryptosystem to each entity constituting the remote access method or program. Finally new claims 14-16 are being rejected in view of Aziz as well.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Smarth whose telephone number is (571)270-1923. The examiner can normally be reached on Monday-Friday(7:30am-5:00pm)est.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerald Smarth

11/19/07



JEFFREY PWU  
SUPERVISORY PATENT EXAMINER